

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for determining code transmit power ~~[[in]]~~ for a time division duplex communication system, comprising:
 - a) obtaining a number of codes in a downlink and a maximum allowed dynamic range;
 - b) determining an upper bound and a lower bound of a signal to interference ratio (SIR) of each code based on a block error rate (BLER) requirement;
 - c) computing a load contributed by each code;
 - d) summing the load to obtain a current total load;
 - e) determining a limit for a sum of upper bound code transmit power based on a current load;
 - f) determining a code with the highest upper bound SIR;
 - g) employing the upper bound code transmit power of the code having the highest upper bound SIR;
 - h) determining a desired relative ratio between the upper bound code transmit power of each code and a reference;
 - i) determining the upper bound transmit power of each code based on a sum of the upper bound code transmit power; and
 - j) setting a lower bound transmit power for each code based on a minimum allowed carrier power of a Node B carrier power in the system.

2. (Original) The method of claim 1, further comprising:
adjusting code transmit powers to lie within a dynamic range.
3. (Original) The method of claim 1, wherein step (a) further comprises:
obtaining a multi-user detector (MUD) efficiency factor and average inter-intracell interference ratio and a maximum allowed load in downlink.
4. (Original) The method of claim 1, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a worst case as the upper bound.
5. (Original) The method of claim 1, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a best case.
6. (Currently amended) A method for determining code transmit power ~~for~~ for a frequency division duplex communication system, comprising:
 - a) obtaining a number of codes in a downlink and a maximum allowed load in the downlink;
 - b) determining an upper bound and a lower bound of a signal to interference ratio (SIR) of each code based on a block error rate (BLER) requirement;
 - c) computing a load contributed by each code;
 - d) summing the load to obtain a current total load;
 - e) determining a limit for a sum of upper bound code transmit power based on a current load;

- f) determining a code with a highest upper bound SIR;
- g) employing the upper bound code transmit power of the code having the highest upper bound SIR;
- h) determining a desired relative ratio between the upper bound code transmit power of each code and a reference;
- i) determining the upper bound transmit power of each code based on a sum of the upper bound code transmit power; and
- j) setting a lower bound transmit power for each code based on a minimum allowed carrier power of a Node B ~~carrier power~~ in the system.

7. (Original) The method of claim 6, further comprising:
adjusting code transmit powers to lie within a dynamic range.

8. (Original) The method of claim 6, wherein step (a) further comprises:
obtaining a maximum allowed dynamic range, an orthogonal factor, and an average inter-intracell interference ratio.

9. (Original) The method of claim 6, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a worst case as the upper bound.

10. (Original) The method of claim 6, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a best case.

11. (Currently amended) A method for determining code transmit power, comprising:

- a) obtaining a number of codes in a downlink in a maximum allowed dynamic range;
- b) determining a lower bound and an upper bound signal-to-interference ratio (SIR) of each code based on a block error rate (BLER) criteria;
- c) determining a code with a highest upper bound SIR and establishing its upper bound transmit code power as a reference;
- d) determining a desired relative ratio between each code upper bound transmit power and the reference;
- e) determining an upper bound transmit power of each code based on a constraint of a maximum Node B carrier power; and
- f) setting a lower bound transmit power for each code at a minimum allowed carrier power of a Node B carrier power.

12. (Original) The method of claim 11, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a worst case as the upper bound.

13. (Original) The method of claim 11, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a best case.

Claims 14-20. (Cancelled)

21. (New) The method of claim 1, further comprising the step of:
adjusting maximum carrier power of the Node B by a given margin to prevent total code transmit power to reach the maximum allowed value.